REMARKS

Application Amendments

By the amendments presented herein, Claims 1, 2, 15, and 41 have been amended to more particularly and distinctly claim the subject matter which Applicants regard as their invention. Basis for the amendments to these claims can be found in the Specification at Page 8, Lines 13-29; Page 18, Lines 14-18; Page 19, Lines 27-30; and, in Claim 15 as originally filed.

Upon entry of the amendments presented, Claims 1-19 and 41-54 remain pending in the application. No additional claims fee is believed due as a result of these amendments.

Invention Synopsis

The present invention is directed to flowable nondigestible oil compositions comprising a liquid polyol fatty acid polyester having a complete melt point of less than about 37° C., and a crystallized solid polyol fatty acid polyester having a complete melt point of at least about 37° C. The solid polyol fatty acid polyester comprises a plurality of crystallized particles which preferably includes a solid saturated polyol polyester, within the liquid polyol fatty acid polyester. The flowable, nondigestible oil compositions have a Consistency (K) within the temperature range of 20° C to 40° C of less than about 600 P.sec $^{(n-1)}$. The crystallized spherulitic solid polyol fatty acid polyester particles have a diameter of from about 3 microns to about 50 microns. The compositions of this invention are capable of being handled and stored in a flowable state at room and ambient storage temperatures, thereby avoiding exposure of the compositions to high temperatures (generally greater than 50° C.) which would otherwise be required to make such compositions flowable. The ability to use ambient handling and storage conditions for the compositions herein tend to minimize the effects of heat and high temperatures on the chemical stability of the polyol fatty acid polyester, which results in greater oxidative stability and flavor stability during extended storage of both the nondigestible oil compositions herein and the food products containing the nondigestible oil compositions.

The present invention is also directed to a process for making flowable nondigestible oil compositions. The process comprises the steps of (1) completely melting the nondigestible oil composition containing the solid polyol fatty acid polyester and the liquid polyol fatty acid polyester, (2) crystallizing the solid polyol polyester into a plurality of crystallized particles, preferably in two crystallization steps or stages; and (3) shearing the polyol polyester composition during the step of crystallizing the solid polyol fatty acid polyester.

Restriction Requirement

In the instant application The Examiner has applied a restriction requirement between the claims of Group I, directed towards compositions of matter, and Group II, directed towards a processes of manufacture. Applicants have elected with traverse to prosecute the claims of Group I, and have accordingly canceled the claims of Group II. Upon election, Claims 1-19 and 41-54 remain pending.

Formal Matters

The Examiner has rejected Claims 1, 2, 4 and 7-12 under 35 U.S.C. § 112, Second Paragraph, as being indefinite with respect to the terms "at least about" (all occurrences) and "less than about'" (all occurrences). Applicants respectfully traverse this rejection.

As is well settled, all that is required to comply with 35 U.S.C §112, second paragraph, is that the metes and bounds of what is claimed be determinable with a reasonable degree of precision and particularity. *Ex parte Wu*, 10 USPQ2d 2031, 2033 (BPAI 1989). See also *In re Warmerdam*, 31 USPQ 2d 1754, 1759 (Fed. Cir. 1994), which held that the legal standard for definiteness is whether a claim reasonably apprises those of skill in the art of its scope.

The terms "less than about" and "at least about " are conventionally employed to set one end of an open-ended range. They clearly denote a "maximum" and a "minimum" to the reader. The term "about" is conventionally used in U.S. patent claim language and has been held to be not indefinite if the parameter being described is not too inherently imprecise. [Cf. Amgen, Inc. v. Chugai Pharmaceutical Co., 18 USPQ 2d 1016 (CAFC, 1991) and W.L. Gore & Assocs., Inc. v. Garlock, Inc., 220 USPQ 303 (CAFC, 1993).] In the instant situation, the parameter being quantified is temperature, measured in °C, which is a parameter capable of relatively precise determination.

Given the state of the law and the nature of the parameters involved, it is respectfully submitted that the terms "less than about" and "at least about" as applied to Applicants' claims would be quite clear and definite to the skilled artisan working with nondigestible fats and oils of the type herein involved. Accordingly, rejection of Claims 1, 2, 4 and 7-12 under 35 U.S.C §112, Second Paragraph, based on the use of these terms in this particular context is improper and should be withdrawn.

Art Rejection under 35 U.S.C §103(a)

It is respectfully submitted that Applicants' Claims are patentable as the Examiner has not established a *prima facie* case of obviousness. According to Section 706.02(j) of the MPEP, the Examiner must meet three basic criteria to establish a *prima facie* case of obviousness:

(1) First, there must be some suggestion or motivation in the prior art to modify the reference or to combine reference teachings.

(2) Second, there must be a reasonable expectation of success in obtaining the claimed invention based upon the references relied upon by the Examiner.

(3) Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

MPEP Section 706.02 (j) further requires that the teaching or suggestion to make the modification or reference combination, and the expectation of success, must be found in the prior art, and may not be based upon the applicant's disclosure.

Here, the Examiner states that Claims 1-19 and 41-54 are unpatentably obvious under 35 U.S.C. §103(a) over Elsen et al. (U.S. Patent No. 5,422,131). The Examiner contends that it would have been "obvious to one of ordinary skill in the art having the Elsen patent before him to obtain the instant claimed nondigestible composition in view of their closely related structures and the resulting expectation of similar organoleptic properties for food prepared with the nondigestible compositions." Applicants respectfully assert that this rejection, as applied to the amended claims, is in error and should be withdrawn.

The Elsen patent discloses a nondigestible fat composition which, though comprised of a liquid component and a solid component, is substantially solid at ambient and room temperatures. The Elsen reference is intended to provide a nondigestible fat composition which when used as a replacement for conventional fats and oils in finished food products effectively eliminates the problem of passive oil loss while maintaining suitable organoleptic properties. The solid portion of the Elsen composition, when cooled rapidly under quiescent conditions (without shearing) and in accordance with the Elsen disclosure, forms crystallized platelet-like structures that aggregate or cluster together. It is believed that because of their porous nature, these aggregated crystallized platelets bind a portion of the liquid component of the nondigestible fat composition, thereby providing the effective passive oil loss protection.

To provide effective passive oil loss protection Elsen specifically teaches that the crystallized platelet-like structures should have a thickness of about 1 micron or less. Elsen continues to teach that thinner crystallized platelet-like structures are preferred from the standpoint of providing more efficient passive oil loss protection, with particles of 0.1 microns being preferred and particles of 0.05 microns being more preferred [Col. 8, Lines 41-52].

In contrast, the compositions of the present invention are directed towards a non-digestible oil that is flowable at room or ambient temperatures. The flowable, non-digestible oil comprises a non-digestible liquid polyol polyester component and a non-digestible solid polyol polyester component. The non-digestible solid polyol polyester component is comprised of solid, spherulitic, polyol fatty acid polyester particles. These solid, spherulitic, polyol fatty acid polyester particles have diameters (i.e., maximum particle dimensions) of from about 3 microns to about 50 microns in size, depending on the initial concentrations of the solid saturated polyol polyester and the presence of solid diversely esterified polyol polyesters in the liquid polyol fatty acid polyester.

The Elsen reference, however, expressly teaches away from the use of non-digestible solid polyol polyester particles with maximum particle dimensions in excess of 1 micron. Elsen clearly teaches that large spherulitic particles may tend to phase separate from the liquid polyol polyesters during storage, resulting in a two-phase system. Furthermore, Elsen teaches that the liquid portion of such two-phase systems provide minimal or no passive oil loss control [Col. 2, Lines 60-68]. As the present invention is intended to provide non-digestible oil compositions that remain flowable during storage Elsen does not provide a motivation to be modified to achieve Applicants' claimed invention.

Moreover, the Elsen reference does not provide an expectation of success in obtaining Applicants' claimed invention as the teachings of Elsen are clearly directed away from the use of solid polyol polyester particles with maximum particle dimensions in excess of 1 micron for the purposes of providing passive oil loss protection. Finally, the Elsen reference does not teach nor suggest each and every element of Applicants' claimed invention as the particle size limitation of about 3 microns to about 50 microns in Applicants' claimed invention is not disclosed.

Given the foregoing considerations, it is respectfully submitted that the Examiner has failed to establish a *prima facie* case of obviousness as the Elsen reference provides no expectation of success in obtaining, and does not teach nor suggest the essential elements of, Applicant's flowable nondigestible oil compositions.

Accordingly, rejection of Applicants, Claims 1-19 and 41-54 over this reference under 35 U.S.C §103(a) is improper and should be withdrawn.

Conclusions

Applicants have made an earnest effort to place their application in proper form and to distinguish their claimed invention from the applied art reference. WHEREFORE, reconsideration of this application, entry of the amendments provided, withdrawal of the rejections under 35 U.S.C §112 and 35 U.S.C §103(a), and allowance of Claims 1-19 and 41-54 are respectfully requested.

Respectfully submitted,

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